



SWIFTY DATALINK

by

TONY DOBRE

Convert your ATARI into a Full Scale
Data Communications Center

High powered features provide the following capabilities:

- Smart Terminal Mode
 - Access Other Computers or Commercial Services
 - Save Information to Disk or Printer
 - Reduce Telephone Connect Time
- Transmits (UPLOADS) Data Files and Programs
- Receives (DOWNLOADS) Data Files and Programs
- Full Interactive Control of Disk Drive Printer

REQUIRES 810 DISK DRIVE

(830 MODEM or EQUIVALENT) Atari BASIC Language

24K Minimum

850 INTERFACE

Printer Optional

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PREFACE

Welcome to the dynamic world of Computer Telecommunications. With DATALINK, access to the rapidly expanding world of information technology is at your command. This easy to use system provides advanced features and capabilities through a convenient single menu screen.

With DATALINK you enter new dimensions of convenience and creativity. DATALINK provides access to commercial information and services at any time of the day or night. You may obtain Stock Market information, get delivery of electronic newspapers, check airline information or even shop at selected stores. Also, you can exchange programs or data over the telephone with persons near or far, leave messages on electronic Bulletin Boards or respond to messages of others.

SWIFTY SOFTWARE, Inc. is proud to present to you DATALINK, a system designed with the future in mind.

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INTRODUCTION

SWIFTY DATALINK is a multi-option Data Communications program written expressly for ATARI Computers. DATALINK offers, for the disk and modem owner, an easy method for using the ATARI as a full-scale data communications computer. DATALINK enables the ATARI to be used as either a remote terminal or as a sending or receiving station with full upload and download capability. This means that programs and data files may be transmitted, via telephone, to other computers and, conversely, received and stored. These features also mean lower communications cost with commercial services since information may be prepared in advance of transmission or read after high speed reception.

Requirements

- 24K RAM minimum
- Atari 810 disk drive
- Atari 850 interface module or equivalent
- Atari 830 modem (or other compatible 300 baud modem)
- Atari BASIC language cartridge
- DOS 2.0S formatted diskettes for file saving
- (Printer Optional)

Getting Started

Turn on the Atari 810 disk drive and Atari 850 interface module. Insert the SWIFTY DATALINK Diskette into the disk drive and turn on the computer. When a Selection Menu appears on the TV or monitor screen, remove the DATALINK Diskette. Turn on the modem and set its switches as explained in the appropriate section below.

Each DATALINK Option appears below along with an explanation of how to use the option.

Using DATALINK

The Selection Menu

After loading DATALINK, a Selection Menu appears on the screen and displays the following choices:

TERMINAL
SEND PROGRAM
RECEIVE PROGRAM
SCREEN DUMP
PRINTER DUMP

The Menu is used to choose a selection by using the OPTION, SELECT or START keys, as explained below.

Menu Mode Selections:

OPTION =

Exit the DATALINK program and return to BASIC.

SELECT =

Moves the selection arrow to indicate a selection. (Also used to exit from a selection back to the Menu.)

START = Start the selection.

The TERMINAL Option

This selection is used to make the ATARI function as a terminal and thus permits communication with commercial information services, such as Compuserve, Dow Jones or The Source, or with computer facilities that require access through a terminal. When using this option with commercial services, the modem should be set to Full Duplex and to Originate.

TERMINAL Mode Selections:

OPTION =

Saves, to disk, data received or inputted by the user since entering from Menu or since START was pressed. (See below.) (As it is received or typed in, data is stored in the computer's memory.) At

the completion of reception or input, or when memory nears being full (as explained later), data should be saved to disk. The file name used to store the information should not contain the device specifier D:.

A file save may be terminated before completion by pressing SELECT.

NOTE: Files should be saved only on disks formatted with DOS 2.0S.

SELECT = Return to menu.

START =

Reinitializes memory storage. Data received previously can now be overwritten by new data as it is received. The user must thus decide whether current data is to be saved before new data is received.

All data, as it is received, is stored in the computer's free memory space. When memory is within 500 bytes of being full, a "MEMORY FULL" warning message is displayed. When this occurs, the information in memory may be saved to disk by pressing OPTION. If this is not done, an "OVERFLOW/CLEAR" message will appear and incoming data will begin to overwrite information at the beginning of memory. Returning to Menu and then reentering the Terminal Mode, reinitializes memory.

To communicate with another terminal or another computer emulating a terminal, both modems should be in Half Duplex, one set to Answer and the other set to Originate.

Receipt of a program, downloaded from another computer, is possible in the Terminal Mode. Reception should be preceded by pressing START. This operation reinitializes memory. When downloading is complete, use OPTION to save the information received to disk. (To ensure user convenience in receiving downloaded programs, it is suggested that the RECEIVE PROGRAM Option be chosen instead of using the Terminal Mode.)

Bulletin Boards and E-Mail

Use DATALINK to compose and send bulletin board notices or electronic mail via commercial services such as Compuserve or The Source. The messages may be entered into memory and

then stored on diskette in advance of dialing the service. (Connect time charges incurred while composing and entering messages may thus be avoided.)

Set the modem to Half Duplex/Originate.
Type in the text that is to be sent.
Press OPTION and save the text as a disk file. (A file name is chosen and the <Return> key pressed.)

To send the file (which, optionally, may be done at a later time), press SELECT to return from terminal emulator to Menu. Select the SEND PROGRAM, type in the file name, press <Return> and press OPTION to transmit the file using ASCII code. When the file is sent, pressing the SELECT key will return the Menu to the screen. Choose the Terminal Option and return to the service called.

To review all data in memory before it is sent, select the SCREEN DUMP or PRINTER DUMP Options.

The SEND PROGRAM Option

This selection is used to send any disk files, i.e., data or programs, stored previously on disk. To exit the selection, press the <RETURN> key. In this mode, the disk file name is first inputted (no D: is needed) and the <RETURN> key is then pressed. As the program loads into memory, the file length, i.e., the number of sectors, appears on the screen. (To abort a disk load, press SELECT.) The maximum number of sectors that can be sent will be displayed on the TV or monitor screen. (Programs exceeding this length should first be divided into listed subfiles and the subfiles sent separately.) After a file is transferred into memory, a prompt for ASCII or ATASCII is given. For Atari to Atari communication, ATASCII is used. For all other applications, ASCII should be chosen. (NOTE: Only Listed, i.e. Untokenized, files can be sent in ASCII.)

The modem should be set to Full Duplex if the receiving end provides an echo-back of the data sent to it. Otherwise, Half Duplex must be used. If using Full Duplex with no echo-back from the receiving station, the program will time out in approximately 7 seconds. That is, the program will indicate the occurrence of transmission errors and will automatically terminate the transmission. If this should occur, the modem should be set to transmit in the Half Duplex mode and transmission reinitiated.

NOTE 1: When transmitting information to commercial services, such as CompuServe, the modem must be set to

Originate and Full Duplex.

NOTE 2: For Terminal to Terminal transmission, users must decide verbally which station will be in the Originate mode and which will be in Answer. Before sending information by pressing either the START or SELECT keys (for ATASCII or ASCII formats), the ready light on the modem must be on. This light indicates that the receiving station is coupled acoustically to the transmission lines and is ready to receive information.

NOTE 3: To abort a transmission while it is in progress, press SELECT.

NOTE 4: To get a directory listing of all the files on a diskette, type D, L or M, followed by <RETURN>, in response to the prompt for the file name that is to be transmitted. Pressing <RETURN> again clears the screen.

The RECEIVE PROGRAM Option

This selection is used to receive and then store (on disk) any program or data file received via modem. After entering this mode, type in the file name of the program or data file to be received and then press the <RETURN> key. (The device specifier, D!, should not be used as part of the file name specification.) The program then searches the disk in drive number one to see if this file name is already in use, how many free disk sectors are available for storage, and whether the disk is write-protected. If a file with the same name already exists on the disk or the number of sectors available are too few to store the incoming data, the user may choose to overwrite the file or substitute a different disk for storage. (If the latter option is desired, the menu should be recalled, another diskette substituted for the one in drive one and the RECEIVE Option reentered.)

When prompted for ASCII or ATASCII, use ATASCII if communication is between ATARI computers. Otherwise, use ASCII. Put the phone receiver in the modem. As soon as the modem's ready light appears, the START or OPTION keys should be pressed. If it is necessary to abort reception before any data has been received, press the BREAK key and then press SELECT. To abort reception during data transfer, only SELECT need be pressed.

NOTE 1: Remember always to decide

in advance which station will be in the Originate mode and which will be in Answer.

NOTE 2: FOR SAVING FILES OR PROGRAMS, USE ONLY DISKETTES FORMATTED WITH DOS 2.0S.

The SCREEN DUMP Option

After receiving data from another computer or a commercial service, the received information, which is stored in memory, can be displayed directly on the screen. Hold down the START key to scan and display memory and release it to stop. One can also dump a disk file to the screen by first using the Send Program Option to load it into memory, pressing SELECT to exit to the Menu and then selecting the Screen Dump Option to display it.

The PRINTER DUMP Option

This option is used the same way as the Screen Dump Option but output is transferred to the printer instead of the screen. During a Printer Dump, use SELECT to exit to the Menu. Otherwise, when printing is complete, the Menu will reappear.

SOME IMPORTANT CHARACTER CODES

Many terminal facilities interpret character codes as shown below. Users should refer to actual specifications where appropriate.

KEYBOARD CHARACTER TYPED	MEANING
TAB	Delete
BACKSPACE	backspace
Control H	backspace
Control Z	bell
Control G	bell
Control S	XOFF (Transmit Off)
Control Q	XON (Transmit On)
Control J	Linefeed
Control L	Formfeed
Control M	Return (CR)
RETURN	Return (CR)

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